

\*This information is for informational purposes only and cannot be seen as an endorsement.

## **AT for Hearing Accommodations**

According to Asselin (2014), vocational rehabilitation service agencies, such as the Virginia Department for Aging and Rehabilitative Services (DARS), are an integral part of assisting individuals in need of hearing accommodations as they transition into the workforce. For example, in an article titled: “An evaluation framework to measure usability of Assistive Technology at workplace: A demonstration study” by Arathanat, Lesner, and Sundar (2016), it was found that a participant who utilized hearing aids was unable to pick up sound across the room with them, which she needed to do to satisfy her job roles. Upon implementation of an amplified headset, the participant was then able to complete this aspect of her job successfully.

This scenario describes just one of countless examples of the use of assistive technology (AT) for hearing accommodations. If you have further questions about this topic please go on the DARS website at <https://www.vadars.org/default.htm#gsc.tab=0> to apply for individualized services to be connected with an occupational therapist who is skilled in AT for individualized services or contact the Virginia Department for the Deaf and Hard of Hearing (<https://www.vddhh.org/>). If you would like more information on which app is best for you without applying for services, please check out Georgia Tech’s “Tools for Life” resource at <https://gatfl.gatech.edu/favorite-search.php>. For further information on job accommodations in the workplace please visit <https://askjan.org> or <https://www.resna.org> to find a certified AT specialist. For more information on low-interest loans on assistive technology, please visit <https://www.atlfa.org>.

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## 1. Tactile Substitution

- There are various tactile aids available to offer accommodations for individuals with hearing loss. These types of aids often vary greatly upon the preferences of the individual and on the specific activities for which the individual is seeking accommodations. Examples of these devices include alarm clocks that shake the bed when the timer goes off

([https://www.amazon.com/Sonic-Alert-SBB500SS-Extra-Loud-Flashing/dp/B000OOWZUK?ref=ws\\_cp\\_5943ed972f53d91751ce\\_p\\_1\\_i\\_p](https://www.amazon.com/Sonic-Alert-SBB500SS-Extra-Loud-Flashing/dp/B000OOWZUK?ref=ws_cp_5943ed972f53d91751ce_p_1_i_p)), or watches that vibrate (such as Apple watches or Fitbits).



## 2. Visual Substitution

- There are multiple visual substitutions available for individuals seeking hearing accommodations. Sign language is the most universal of visual substitutions for those with hearing loss. Sign language is expressed through the movement of the hands and face, please watch (<https://www.youtube.com/watch?v=v1desDduz5M>) for more information on sign language. Visual alerting devices (more information on other alerting devices is available below), closed captioning during videos, text labels for computer-generated synthetic speech (speech-to-text software), and visual alarms

(<https://www.amazon.com/Thomas-5013-Traceable-Big-Digit-Accuracy/dp/B006OCMCYK>) are popular choices for individuals seeking hearing accommodations.

### 3. Hearing Aids

- There are many different kinds of hearing aids available for individuals in need of hearing accommodations. Types of hearing aids usually depend on the preferences of the individual and the degree of hearing loss. For example, there are behind-the-ear hearing aids, in-the-ear hearing aids, and multiple specialized hearing systems, such as cochlear implants. There are now also many apps available that link to hearing aids for easier access and troubleshooting. If you have further questions about this topic please contact an audiologist.



- Other Assistive Listening Devices

Individual, small-group, classroom, and large-group assistive listening devices are also available for individuals with hearing loss. Assistive listening devices are hand-held devices that amplify sound with microphones so that the individual is able to hear the sound closer to their ears. Please watch <https://www.youtube.com/watch?v=0QbRLAr1VFM> and [https://youtu.be/lu3M\\_nggyGo](https://youtu.be/lu3M_nggyGo) for more information on assistive listening devices.

#### 4. Technology for Communication and Increased Participation

- According to Basas (2013), “Failures in technology and accommodation result in missed communication, lack of inclusion in decision-making processes, reduced productivity and increased stress and absenteeism” (p. 78). Taking this into consideration, there are multiple types of technology created to enhance face-to-face communication between individuals with and without hearing loss. These types of technologies are available to support individuals seeking hearing accommodations have the ability to communicate and participate equitably. Examples of these types of technologies are software such as the Sorensen Interpreting software ([https://www.sorensonvrs.com/work\\_faqs](https://www.sorensonvrs.com/work_faqs)) and Interprettype (<https://www.youtube.com/watch?v=BZNaym7CSAc>) are frequently used for individuals in need of hearing accommodations.
- Additionally, there are various telephone devices or features that aid access to mobile phones such as microphones, FM systems, Bluetooth devices, CapTel (<https://www.captel.com>), voice carry-over, hearing carry-over, short message services. For more information on technology for communication or increased participation please contact an audiologist.

#### 5. Alerting Devices

- There are various types of alerting devices available for individuals with hearing loss. Examples of these include motion sensors or home camera systems such as Nest ([https://store.google.com/us/category/connected\\_home](https://store.google.com/us/category/connected_home)), Wyze (<https://wyze.com>), or Ring (<https://ring.com>). Flashing lights on phones, smoke alarms, and alarm clocks are also common accommodations for those seeking alerting devices. Please watch <https://www.youtube.com/watch?v=mKFDwti5Wyk> for more information on alerting systems.



### Case Study Example:

Robert is a 47-year-old male who recently lost his sense of hearing due to a firework accident. Robert works in a large warehouse filling delivery orders but since his accident, he has difficulty communicating with his coworkers and supervisors. Robert's manager contacted an occupational therapist who specializes in assistive technology to assess Robert's accommodation needs at the workplace. After meeting with the occupational therapist, it was determined that the "no cell phone" policy in the warehouse would be forgone for Robert so that he could have his phone out to be able to send or receive texts from his coworkers and supervisors so that he can effectively communicate with them during the work hours. Additionally, a flasher was installed in the workplace to alert Robert of danger in emergency situations. Robert reports being successful with the use of his cell phone to communicate at work and his manager reports no further issues.

### References

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